

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Please cancel claims 50-211. Please add the following new claims.

212. (New) A computer-implemented method of operating a service to generate a result for an electronic mail ("e-mail") message, comprising:

by the service, receiving a request comprising meta-data information regarding the e-mail message,

by the service, processing at least a portion of the request to determine the result using a service private key, the service private key kept secret by the service; and

by the service, providing the result for incorporation of the result into the e-mail message prior to the e-mail message being transmitted to a recipient of the e-mail message, as a result-incorporated e-mail message, via an e-mail system.

213. (New) The method of claim 212, wherein:

the meta-data information regarding the e-mail message includes at least an e-mail address of a sender of the e-mail message.

214. (New) The method of claim 212, wherein:

the request further includes a digest of a body of the e-mail message.

215. (New) The method of claim 214, wherein:

the digest of the body of the e-mail message has been generated using an SHA algorithm.

216. (New) The method of claim 212, wherein:

the request does not include the body of the e-mail message or information from which the body of the e-mail message can be derived.

217. (New) The method of claim 212, wherein:

the service determines the result to further include an indication of a level of certification of the e-mail message.

218. (New) The method of claim 212, wherein:
the request further comprises sender verification information; and
the method further comprises, by the service, processing the sender verification information.
219. (New) The method of claim 212, wherein:
a sender is associated with e-mail message; and
the method further comprises, by the service, determining how the sender may be later located.
220. (New) The method of claim 219, wherein:
determining how the sender may be later located includes associating a degree of certainty with the determination.
221. (New) The method of claim 220, wherein:
the result includes an indication of the degree of certainty.
222. (New) The method of claim 221, wherein:
a sender of the e-mail message is associated with a particular e-mail address of a plurality of e-mail addresses; and
the method further comprises:
at the service, before providing the result for incorporation of the result into the e-mail message, sending an inquiry e-mail message to the particular e-mail address; and
at the service, observing behavior of the sender associated with the inquiry e-mail message.
223. (New) The method of claim 222, wherein:
the behavior of the sender associated with the inquiry e-mail message includes the sender sending an e-mail message to the service in reply to the inquiry e-mail message.
224. (New) The method of claim 222, wherein:
the behavior of the sender associated with the inquiry e-mail message includes following instructions set forth in the inquiry e-mail message.

225. (New) The method of claim 224, wherein:
the instructions include instruction to link to a particular universal resource locator.
226. (New) The method of claim 222, further comprising:
by the service, before providing the result for incorporation into the e-mail message, receiving a request for the sender to subscribe to the service;
by the service, sending an inquiry message to a sender associated with the sender's side, by a transmission channel other than the electronic mail system; and
by the service, observing behavior associated with the inquiry message.
227. (New) A method for a recipient of an electronic mail ("e-mail") message to validate a sender of the e-mail message, comprising:
receiving the e-mail message;
processing a header field of the received e-mail message using a public key of a service to generate a first result;
processing a portion of the received e-mail message to generate a second result, the portion of the e-mail message including at least metadata information regarding the received e-mail message but not including the header field of message processed to generate the first result; and
comparing the first result to the second result to assess the integrity of the received e-mail message.
228. (New) The method of claim 227, wherein:
the metadata information regarding the received e-mail message includes at least information in a header field of the message configured to hold an e-mail address of the sender of the received e-mail message.
229. (New) The method of claim 227, wherein:
the portion of the e-mail message processed to generate the second result includes a body of the received e-mail message.
230. (New) The method of claim 227, wherein:

the second result is a digest of a body of the received e-mail message.

231. (New) The method of claim 227, wherein:

the step of processing the received result-incorporated e-mail message to assess the integrity of the e-mail message includes:

deriving the portion of the request from which the result was determined;

processing the portion of the request and the received e-mail message to assess the integrity of the e-mail message.

232. (New) The method of claim 231, wherein:

deriving the portion of the request from which the result was determined includes processing the result using the service public key to generate a decrypted result;

processing the portion of the request and the received e-mail message to assess the integrity of the e-mail message includes

generating a digest of the message body and processing the generated digest and the decrypted result to assess the integrity of the e-mail message.

233. (New) The method of claim 227, wherein:

the step of processing the received result-incorporated e-mail message to assess the integrity of the e-mail message includes processing the result to determine a level of certification of the e-mail message.

234. (New) The method of claim 227, wherein:

processing the received result-incorporated e-mail message to assess the integrity of the e-mail message is without interacting with a service that created the result, prior to the result having been incorporated into the e-mail message.

235. (New) The method of claim 227, further comprising:

sending a request to obtain contact information about the sender from a service that created the result, prior to the result having been incorporated into the e-mail message; and

receiving the requested contact information about the sender.

236. (New) The method of claim 235, wherein:
the requested contact information about the sender is in a format appropriate to an e-mail client program used by the recipient.
237. (New) The method of claim 235, wherein:
the requested contact information includes at least one link to sender advertising.
238. (New) A computing system configured to be usable by a recipient of an electronic mail ("e-mail") message to validate a sender of the e-mail message, the computing system configured to:
- receive the e-mail message;
 - process a header field of the received e-mail message using a public key of a service to generate a first result;
 - process a portion of the received e-mail message to generate a second result, the portion of the e-mail message including at least metadata information regarding the received e-mail message but not including the header field of message processed to generate the first result; and
 - compare the first result to the second result to assess the integrity of the received e-mail message.